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ABSTRACT

The "Curriculum and Evaluation Standards for School Mathematics" (1989) provides a vision and a framework for revising and strengthening the K-12 mathematics curriculum in North American schools and for evaluating both the mathematics curriculum and students' progress. The document not only addresses what mathematics students should learn but also how they should learn it. When completed, it is expected that the Addenda Series will consist of 22 supporting books designed to interpret and illustrate how the vision could be translated into classroom practices. Targeted at mathematics instruction in grades K-6, 5-8, and 9-12, the themes of problem solving, reasoning, communication, and connections are woven throughout the materials, as is the view of assessment as a means of guiding instruction. Activities have been field tested by teachers to ensure that they reflect the realities of today's classrooms. The Fourth-Grade Book of the K-6 series begins with a preface describing the rational for transforming the mathematics classroom into a sense-making experience with new roles for both the student and teacher. The book presents 19 fourth-grade activities that have been infused with an investigative flavor, exploring both traditional and new topics in four areas: (1) Patterns; (2) Number Sense; (3) Making Sense of Data; and (4) Geometry and Spatial Sense. Margin notes give additional information on the activities and on such topics as student self-confidence, evaluation, and grouping. (MDH)